September 1995

INDEX TO DOCUMENTS RELEVANT TO THE MODIFICATIONS AND REPAIRS OF SANTA CLARA VALLEY WATER DISTRICT DAMS

9

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Santa Clara Valley Water District

MEMORANDUM

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TO: Distribution

FROM: Robert E. Tepel

SUBJECT: Index to Documents Relevant to the Modifications and Repairs of Santa Clara Valley Water District Dams

DATE: September 12, 1995

Attached is a copy of the subject report for your files. This is a companion report to the document entitled "Index to Documents Relevant to the Construction of Santa Clara Valley Water District Dams," distributed on August 22, 1995.

Engineering Geologist
Water Facilities Branch

Attachment

Distribution:

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SANTA CLARA VALLEY WATER DISTRICT

INDEX TO DOCUMENTS RELEVANT TO THE MODIFICATIONS AND REPAIRS OF SANTA CLARA VALLEY WATER DISTRICT DAMS

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SEPTEMBER 1995

R10040

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INTRODUCTION

This compilation lists major improvements and modifications to Santa Clara Valley Water District (District) dams and appurtenant facilities that have been completed as normal projects, generally going through the stages of planning, design, and construction. Routine maintenance and priority actions are not listed. Some studies conducted of the dam sites are not listed as they did not lead to modifications or additional construction at the dams. A companion compilation lists documents pertinent to construction of District dams.

The table below lists: (1) complete formal names of dams owned by the District, (2) the identifying number assigned to each dam by the Division of Safety of Dams in the California Department of Water Resources (DSOD), and (3) the District Project Number.

Name of Dam	DSOD Number	District Project Number
Almaden Dam	72-004	9185
Calero Dam	72-003	9187
Coyote Dam	72-002	9188
Coyote Percolation Dam	72-000	9248
Elmer J. Chesbro Dam	72-011	9194
Guadalupe Dam	72-005	9189
Leroy Anderson Dam	72-009	9186
Lexington Dam	72-008	9190
Page Dam	nonjurisdictional	9260
Rinconada Reservoir	72-010	9450
Standish Dam	72-013	9262
Stevens Creek Dam	72-007	9191
Uvas Dam	72-012	9193
Vasona Percolation Dam	72-006	9192

A peculiarity of the numbering system used by DSOD is that the first dam registered to an owner is given a file accession number denoting the owner's number, followed by three zeros, e.g., the District is owner No. 72, and Coyote Percolation Dam is dam No. 72-000. The second dam registered by an owner is No.-002, the third is No. -003, etc.

Finding all desirable records has been difficult because of the age of the dams. Files searched include the District library, Central Files, Construction Division files, and Water Facilities Branch files. As time permitted, files at the Division of Safety of dams in Sacramento were researched in conjunction with visits for other purposes. This compilation is preliminary. Corrections and additions are welcome and should be addressed to the study director.

ALMADEN DAM (STATE DAM NO. 72-004)

I. RELOCATION OF ALMADEN ROAD (COMPLETED IN 1935 or 1936)

A. Purpose

To relocate Almaden Road around the reservoir.

B. Background

Undocumented

C. Scope of Work

Relocate Almaden Road around reservoir including adding 1605 cubic yards of fill.

D. Planning Study and Engineers Report

Title:
Date:
Author:
Library Call Number:

E. Geotechnical Report(s) (None)

Title:
Date:
Author:
Library Call Number:

F. Plans and Specifications (None)

Title:
Date:
Library Call Number:
Engineering Drawing Numbers: 3290

G. Construction Contract (None)

Awarded to:
Construction Period:
Final Cost:
Bid Amount:

Note: Only incomplete information is available.

II. INLET TOWER EXTENSION (COMPLETED IN 1960)

A. Purpose

Extend inlet tower above silt level.

B. Background

Presume reservoir siltation was interfering with operation of existing inlet tower structure.

C. Scope of Work

Construct a 10-foot high inlet tower extension.

D. Planning Study and Engineers Report (None. Maintenance project.)

Title:
Date:
Author:
Library Call Number:

E. Geotechnical Report(s) (None)

Title:
Date:
Author:
Library Call Number:

F. Plans and Specifications (None)

Title:
Date:
Library Call Number:
Engineering Drawing Numbers: 2815

G. Construction Contract (not available)

Awarded to: District
Construction Period: 1960
Final Cost:
Bid Amount:

III. MODIFICATION OF VALVE OPERATOR AND CONSTRUCTION OF OUTLET CONTROL HOUSE (COMPLETED IN 1971)

A. Purpose

To provide a local means of control of the outlet valves.

B. Background

The outlet valve control that discharged to the creek was in a pit and operated by hand to this point. The structure was raised to make operating the valve controls more convenient.

C. Scope of Work

To raise the existing valve operator and build an outlet control structure on existing control structure at Almaden Reservoir.

D. Planning Study and Engineers Report (None. Maintenance project.)

Title:
Date:
Author:
Library Call Number:

E. Geotechnical Report(s) (None)

Title:
Date:
Author:
Library Call Number:

F. Plans and Specifications

Title: Specifications and Contract Document for the Modification of the Valve Operator and for the Construction of an Outlet Control House at Almaden Reservoir and Stevens Creek Reservoir
Date: 6/22/71
Library Call Number: 1.5.0327
Engineering Drawing Numbers: 03686-03689

G. Construction Contract[1]

Awarded to: Terra and Weaver, Inc.
Construction Period: 9/6/71 to 10/26/71
Final Cost: $13,115.75
Bid Amount: $12,300.00

---

[1] Information from Central Files.

IV. REPAIR OF OUTLET WORKS CONCRETE (COMPLETED IN 1977)

A. Purpose

Undocumented

B. Background

Undocumented

C. Scope of Work

Undocumented

D. Planning Study and Engineers Report (None. Maintenance project.)

Title:
Date:
Author:
Library Call Number:

E. Geotechnical Report(s) (None)

Title:
Date:
Author:
Library Call Number:

F. Plans and Specifications (None)

Title:
Date:
Library Call Number:
Engineering Drawing Numbers: None

G. Construction Contract(1)

Awarded to: Engineered Concrete Waterproofing
Construction Period: Approx. 3/31/77 to 4/30/77
Final Cost:
Bid Amount: $815.00

---

(1) Information from memo to Eric Simons from E.C.W. dated March 31, 1977 (Central Files).

Note: Only incomplete information is available.

V. OUTLET MODIFICATIONS AND REPAIRS (COMPLETED IN 1987)

A. Purpose

To provide a local means of control of the outlet valves.

B. Background

Undocumented.

C. Scope of Work

To make modifications and repairs to Almaden Dam and Guadalupe Dam outlet facilities. Work consists of raising the existing valve operator, constructing an outlet control house on the existing outlet control structure at Almaden Reservoir, and repairing of the energy dissipator at Guadalupe Reservoir.

D. Planning Study and Engineers Report (None. Maintenance project.)

Title:
Date:
Author:
Library Call Number:

E. Geotechnical Report(s) (None)

Title:
Date:
Author:
Library Call Number:

F. Plans and Specifications

Title: Specifications and Contract Documents for the Modifications and Repairs to Almaden Dam and Guadalupe Dam Outlet Facilities
Date: February 1987
Library Call Number: None. Specifications are in Construction Division.
Engineering Drawing Numbers: 14233-14234, 14239-14248

G. Construction Contract

Awarded to: Anderson-Pacific
Construction Period: 5/11/87 to 8/28/87
Final Cost: $123,043.31
Bid Amount: $104,000.00

CALERO DAM (STATE DAM NO. 72-003)

I. RAISING OF DAM AND SPILLWAY (COMPLETED IN 1963)

A. Purpose

To restore the dam to original crest height and to restore freeboard to the spillway.

B. Background

Dam crest elevation lowered approximately one foot since the dam's construction as a result of fill settlement. Due to surveying errors during construction, the spillway crest was built about 1 foot too low. The 1963 raising of the spillway crest corrected this error.

C. Scope of Work

To raise the dam to original crest elevation and to restore freeboard to the spillway

D. Planning Study and Engineers Report (None)

Title:
Date:
Author:
Library Call Number:

E. Geotechnical Report(s) (None)

Title:
Date:
Author:
Library Call Number:

F. Plans and Specifications (None)

Title:
Date:
Library Call Number:
Engineering Drawing Numbers: 3085

G. Construction Contract (None)

Awarded to:
Construction Period:
Final Cost:
Bid Amount:

II. INSTALLED FISH SCREEN/REPLACED HYDRAULIC LINES/RECONDITIONED HYDRAULIC CYLINDER AND D/S BUTTERFLY VALVE (COMPLETED IN 1982)

A. Purpose

Reduce number of fish getting to RWTP via Almaden Valley Pipeline.

B. Background

Excessive fish at RWTP interfered with water treatment.

C. Scope of Work

Fabricate and install fish screens.

D. Planning Study and Engineers Report (None. Maintenance project.)

Title:
Date:
Author:
Library Call Number:

E. Geotechnical Report(s) (None)

Title:
Date:
Author:
Library Call Number:

F. Plans and Specifications (None Found)

Title:
Date:
Library Call Number:
Engineering Drawing Numbers: 12255-12258 (fish screen)

G. Construction Contract—Fish Screens(1)

Awarded to: Santa Rosa Steel Forming (Equipment supply contractors)
Construction Period: September 1982
Final Cost: $5961.02

---

(1) Information from Central Files.

III. INSTALLATION OF "T" AND CONNECTION OF CALERO SIPHON (COMPLETED IN 1989)

A. Purpose

To supplement flow capacity of the original outlet structure to the Almaden Valley pipeline

B. Background

The outlet pipe was too small to draw the desired amount of reservoir water to the Almaden Valley pipeline. To increase flow, the siphons were installed.

C. Scope of Work

Install siphons, primer pump, and T.

D. Planning Study and Engineers Report (None)

Title:
Date:
Author:
Library Call Number:

E. Geotechnical Report(s) (None)

Title:
Date:
Author:
Library Call Number:

F. Plans and Specifications (None)

Title:
Date:
Library Call Number:
Engineering Drawing Numbers: None

G. Construction Contract(1)

Awarded to: District
Construction Period:
Final Cost:
Bid Amount:

---

(1)Information from Central Files.

IV. CALERO PIPELINE (COMPLETED IN 1989)

A. Purpose

To connect Cross Valley and Almaden Valley pipelines with a 78-inch gravity flow conduit.

B. Background

Permits flexibility in routing Cross Valley Pipeline flows around Calero Reservoir.

C. Scope of Work

Install a 78-inch gravity flow pipeline over about 2 miles (connecting the Cross Valley and Almaden Valley pipelines). Also, construct line valve vault, flowmeter vault, and modulating valve vault.

D. Planning Study and Engineers Report (None)

Title:
Date:
Author:
Library Call Number:

E. Geotechnical Report(s)

Title: Geotechnical Investigation, Calero Pipeline
Date: January 1986
Author: Wahler Associates
Library Call Number: TA 705.3 C35 C3 1986

F. Plans and Specifications (None)

Title: Specifications and Contract Documents for the Construction of Calero Pipeline from the Termination of Cross Valley Pipeline Phase III, at a Point 2900' ± Southeasterly of the Intersection of McKean Road and Bailey Avenue to the Termination of the Almaden Valley Pipeline, at the Base of Calero Dam and the Telemetry Cable Replacement for the Existing Almaden Valley Pipeline, Unit II, Phase II and the Existing Cross Valley Pipelines, Phases I, II, III, and IV.
Date: March 7, 1989
Library Call Number: None. Specifications in Construction Division as Specifications No. 301.
Engineering Drawing Numbers: 15079-15242; Other (hearing plans)—16143-16155.

G. Construction Contract (None)

Awarded to: C. R. Fedrick, Inc.
Construction Period: 5/15/89-3/10/90
Final Cost: $7,957,349.00
Bid Amount: $7,789,520.00

V. SEEPAGE MITIGATION (COMPLETED IN 1991)

A. Purpose

To mitigate seepage at Calero Dam

B. Background

Seepage has historically occurred on the downstream face of Calero Dam near the right abutment. Due to DSOD's concern, a grout curtain was emplaced at the dam.

C. Scope of Work

To drill and grout a double row grout curtain into the foundation bedrock beneath the right end of the existing embankment and extending into the right abutment beyond the end of Calero Dam; to drill exploratory core holes for purposes of assessing the effects of the grouting program and installing open-well piezometers, if necessary, to replace piezometers plugged during the grouting.

D. Planning Study and Engineers Report (None)

Title:
Date:
Author:
Library Call Number:

E. Geotechnical Report (Analysis)

Title: Foundation Grouting, Right Abutment, Calero Dam
Date: January 1992
Author: Wahler Associates
Library Call Number: TC 557 .C2 C35 1992

Title: Installation of Supplemental Piezometers at Calero Dam
Date: July 1990
Author: Wahler Associates
Library Call Number: TC 557 C2 C35 1990

Title: Memorandum—review of Seepage Investigations, Calero Reservoir
Date: March 27, 1968
Author: Wire, J.C. (SCVWD)
Library Call Number: None

Title: Geological and Engineering Feasibility Investigation, Stage 1 Report—Calero Dam and Reservoir Enlargement Project
Date: 1966
Author: Soil Mechanics and Foundation Engineers, Inc.
Library Call Number:

Title: Memorandum—seepage Investigations at Calero Reservoir
Date: January 10, 1969
Author: Roman, W., and Wire, J. (SCVWD)
Library Call Number: None

F. Geotechnical Report (Design)

Title: Final Design Report, Calero Dam Seepage Mitigation Project
Date: March 1991
Author: Wahler Associates
Library Call Number: 1.4.0841

G. Plans and Specifications

Title: Specifications and Contract Documents, Calero Dam Seepage Mitigation Project
Date: May 1991
Library Call Number: None. Specifications are in Construction Division.
Engineering Drawing Numbers: 16159-16164

H. Construction Contract

Awarded to: Continental Drilling Company
Construction Period: 7/29/91 to 12/10/91
Final Cost: $340,810.00
Bid Amount: $469,447.50

VI. REPLACEMENT OF HYDRAULIC PIPING (COMPLETED IN 1994)

A. Purpose

Replace corroded hydraulic piping.

B. Background

Galvanic corrosion since last replacement required the work.

C. Scope of Work

To replace hydraulic piping between valve operating vault and inlet valve in reservoir.

D. Planning Study and Engineers Report (None. Maintenance project.)

Title:
Date:
Author:
Library Call Number:

E. Geotechnical Report(s) (None)

Title:
Date:
Author:
Library Call Number:

F. Plans and Specifications (None)

Title:
Date:
Library Call Number:
Engineering Drawing Numbers: None

G. Construction Contract (None)

Awarded to:
Construction Period:
Final Cost:
Bid Amount:

COYOTE DAM (STATE DAM NO. 72-002)

I. INLET TOWER EXTENSION (PROBABLY COMPLETED IN 1961)

A. Purpose

Extend inlet tower above silt level.

B. Background

Presume reservoir siltation was interfering with operation of existing inlet tower structure.

C. Scope of Work

Construct a 17-foot high inlet tower extension.

D. Planning Study and Engineers Report (None)

Title:
Date:
Author:
Library Call Number:

E. Geotechnical Report(s) (None)

Title:
Date:
Author:
Library Call Number:

F. Plans and Specifications (None)

Title:
Date:
Library Call Number:
Engineering Drawing Numbers: 3030

G. Construction Contract (None)

Awarded to: District
Construction Period:
Final Cost:
Bid Amount:

II. OUTLET WORKS MODIFICATION (PROBABLY COMPLETED IN 1964)

A. Purpose

Permit outlet operation by downstream regulation because of recurrent outlet cavitation under upstream valve throttling.

B. Background

Not documented in District files. Reference found in DSOD files (1963-1964).

C. Scope of Work

Install butterfly valves to avoid cavitation.

D. Planning Study and Engineers Report (None)

Title:
Date:
Author:
Library Call Number:

E. Geotechnical Report(s) (None)

Title:
Date:
Author:
Library Call Number:

F. Plans and Specifications (None)

Title:
Date:
Library Call Number:
Engineering Drawing Numbers: 3128, 3149.

G. Construction Contract (None)

Awarded to: District
Construction Period:
Final Cost:
Bid Amount:

Note: Only incomplete information is available.

III. SPILLWAY CUTSLOPE REGRADING (COMPLETED IN 1978)

A. Purpose

To regrade existing spillway cut slope to prevent landsliding.

B. Background

A 1976 investigation revealed that the steep slope above the right side of the spillway was unstable. Further movement could impact spillway capacity, therefore regrading was conducted.

C. Scope of Work

To regrade the existing spillway cut slope, dispose of excavation, install subdrains, and perform auxiliary work as required to remove loose and unneeded "borrow" material left on the spillway cut slope after construction in the late 1930s tended to creep down the slope and enter the spillway approach channel and weir areas. Although these areas were widened during the original construction to accommodate the loose rock, complete removal of all loose material was desirable.

D. Planning Study and Engineers Report (None. Maintenance project.)

Title:
Date:
Author:
Library Call Number:

E. Geotechnical Report (Analysis)

Title: Coyote Dam Spillway Investigation—Phase I
Date: August 1976
Author: Earth Sciences Associates
Library Call Number: QE 599 C69 C6 1976

F. Geotechnical Report (Design)

Title: Coyote Dam Spillway Final Design Report
Date: June 1977
Author: Earth Sciences Associates
Library Call Number: TC 425 C69 C6 1977

G. Plans and Specifications

Title: Specifications and Contract Documents for the Spillway Regrading at Coyote Dam
Date: 1977
Library Call Number: 1.4.0499. Also, a copy of Specifications are in Construction Division
Engineering Drawing Numbers: 09668-09700

H. Construction Contract

Awarded to: Hunington Brothers
Construction Period: 10/11/77 to 1/9/78
Final Cost: $151,271.75
Bid Amount: $142,890.00

IV. SPILLWAY REPLACEMENT, PHASE 1 (COMPLETED IN 1984)

A. Purpose

To replace existing spillway lining with a structural section; to remove the small hill between the dam and the left spillway wall.

B. Background

The original spillway lining was a nonstructural section that was damaged over the years by rebound and expansive foundation materials; it was also damaged by alkali-aggregate reaction.

C. Scope of Work

Removal and disposal of designated existing concrete spillway lining and construction of approximately 2170 cubic yards of reinforced concrete lining; construction of new nonreinforced concrete embankment; and other miscellaneous items to satisfactorily complete repair work.

D. Planning Study and Engineers Report (None)

Title:
Date:
Author:
Library Call Number:

E. Geotechnical Reports (Analysis)

Title: Geotechnical Investigation and Evaluation, Phase 2, Coyote Dam Spillway
Date: 1985
Author: Earth Science Associates
Library Call Number: TA 705.3 C69 G4 1985

Title: Engineering Geology Evaluation of Coyote Dam Spillway
Date: 1985
Author: Tepel, Robert E.
Library Call Number: 1.5.0605

F. Geotechnical Reports (Design)

Title: Coyote Dam Spillway Final Design Report
Date: 1985
Author: Earth Science Associates
Library Call Number: 1.4.0494

G. Plans and Specifications

Title: Specifications and Contract Documents for the Construction of Repairs to Coyote Dam Spillway at Coyote Dam, Phase I
Date: 1984
Library Call Number: 1.5.0557
Engineering Drawing Numbers: 12109-12127

H. Construction Contract

Awarded to: Liton Construction
Construction Period: 6/18/84 to 10/15/84
Final Cost: $596,183.29
Bid Amount: $592,437.00

V. SPILLWAY REPLACEMENT, PHASE 2 (COMPLETED IN 1985)

A. Purpose

To replace existing spillway lining with a structural section; to remove the small hill between the dam and the left spillway wall.

B. Background

The original spillway lining was a nonstructural section that was damaged over the years by rebound and expansive foundation materials; it was also damaged by alkali-aggregate reaction.

C. Scope of Work

Replace spillway lining with a structural section; remove accumulated loose rock material from the cut above the spillway and spillway approach channel.

D. Planning Study and Engineers Report (None)

Title:
Date:
Author:
Library Call Number:

E. Geotechnical Reports (Analysis)

Title: Geotechnical Investigation and Evaluation, Phase 2, Coyote Dam Spillway
Date: 1985
Author: Earth Science Associates
Library Call Number: TA 705.3 C69 G4 1985

Title: Engineering Geology Evaluation of Coyote Dam Spillway
Date: 1985
Author: Tepel, Robert E.
Library Call Number: 1.5.0605

F. Geotechnical Reports (Design)

Title: Coyote Dam Spillway Final Design Report
Date: 1985
Author: Earth Science Associates
Library Call Number: 1.4.0494

G. Plans and Specifications

Title: Specifications and Contract Documents for the Construction of Repairs to Coyote Dam Spillway at Coyote Dam, Phase II
Date: 1985
Library Call Number: 1.5.0557-2
Engineering Drawing Numbers: 13126-13168

H. Construction Contract

Awarded to: J.H. Pomeroy
Construction Period: 6/24/85 to 10/21/85
Final Cost: $1,287,761.58
Bid Amount: $1,094,007.00

VI. NEW OUTLET WORKS (COMPLETED IN 1991)

A. Purpose

To replace existing inlet structure, which was subject to accumulation of reservoir sediment, and to provide an outlet works which would be operated as an unpressurized tunnel flowing partially full and discharging to atmosphere.

B. Background

The existing inlet structure had been raised at least twice. An additional raise would not meet seismic stability criteria. In addition, it was desirable to have an unpressurized outlet tunnel discharging to atmosphere so inspection, maintenance and repair could be done efficiently. The original and new outlet works intersect potentially active faults; the new outlet tunnel is designed to accommodate expected offset on the fault and remain safely operational.

C. Scope of Work

New inlet structure with Howell-Bunger service valve and low-level auxiliary ball valve, new hydraulic valve operating lines; new intake structure, new outlet tunnel, new discharge chute to existing stilling basin, new control bulding, flow meters (2), and solar power/generator system.

D. Planning Study and Engineers Report

Title: Coyote Dam Outlet Works Replacement Planning Study Consisting of the Engineer's Report
Date: February 1989
Author: Uyeda, Karen
Library Call Number: 1.5.729/PSFEB89

Title: Coyote Dam Outlet Works Replacement Final Negataive Declaration Project 9188
Date: June 1990
Author: Santa Clara Valley Water District
Library Call Number: 1.5.729/FJ90

E. Geotechnical Reports (Analysis)

Title: Coyote Dam Outlet Works, Phase I Geotechnical Investigation
Date: November 1989
Author: Earth Sciences Associates and Calpine Corporation
Library Call Number: TA 705.3 S383 C69 1989

Title: Coyote Dam Outlet Works, Phase II Geotechnical Investigation (addendum report)
Date: May 1990
Author: Earth Sciences Associates
Library Call Number: TA 705.3 S383 C69 1990

Title: Coyote Dam Outlet Works Replacement, Phase III Geologic Mapping and Construction Observation
Date: October 1991
Author: Earth Sciences Associates
Library Call Number: TA 705.3 S383 C69 1991

Title: Geoslope—Slope Stability Analysis—Simplified Janbu Method of Slice Irregular Failure Surfaces
Date: Date unknown (1984 or later)
Author: Unknown (no text, only numerical values, therefore no author)
Library Call Number: Archives Box 9029
Note: Bound, but not a formal report

F. Geotechnical Reports (Design)

Title: Feasibility Investigation and Conceptual Design, New Outlet Facilities, Coyote Dam
Date: August 1988
Author: Richard J. Proctor, Inc. and R.L. Volpe & Associates, Inc.
Library Call Number: TA 705.3 S383 F4 1988

Title: Geotechnical Design Summary Report for Coyote Dam Outlet Works Replacement
Date: July 1990
Author: Earth Sciences Associates
Library Call Number: TA 705.3 S383 G4 1990

Title: Coyote Dam and Reservoir, Outlet Works Replacement—Outlet Tunnel Liner Design Summary Report
Date: March 1990
Author: Calpine Corporation
Library Call Number: TC 171.5 C69 1990

Title: Coyote Dam and Reservoir, Outlet Works Replacement—Project Design Report
Date: July 1990
Author: Calpine Corporation
Library Call Number: TC 180 C69 1990

Title: Coyote Dam Outlet Works Replacement, Structural Calculations
Date: August 1990
Author: Calpine Corporation
Library Call Number: Archives Box 9029
Note: Notes of final calculations, bound data but not a formal report.

G. Plans and Specifications

Title: Specifications and Contract Documents for Coyote Dam Outlet Works Replacement
Date: July 1990
Library Call Number: TC 557.C2 C69 1990
Engineering Drawing Numbers: 16003-16060

H. Construction Contract

Awarded to: Anderson-Pacific
Construction Period: 9/10/90 to 10/14/91
Final Cost: $4,366,644.00
Bid Amount: $4,182,700.00

COYOTE PERCOLATION DAM (STATE DAM NO. 72-000)

I. REHABILITATION (COMPLETED IN 1978)

A. Purpose

To modify existing Coyote Percolation Dam by removing original flashboards and installing new removable crest panels.

B. Background

Necessary to replace parts of the structure because they were deteriorating.

C. Scope of Work

To fabricate and install a removable steel dam utilizing about 22,500 pounds of steel including all appurtenances, auxiliary facilities and auxiliary work as required.

D. Planning Study and Engineers Report (None)

Title:
Date:
Author:
Library Call Number:

E. Geotechnical Report(s) (None)

Title:
Date:
Author:
Library Call Number:

F. Plans and Specifications

Title: Specifications and Contract Documents for the Fabrication and Installation of Removable Dam at Coyote Creek
Date: 1978
Library Call Number: 1.5.0305
Engineering Drawing Numbers: 10201-10203

G. Construction Contract

Awarded to: LoPaka Corporation
Construction Period: 3/20/78 to 5/18/78
Final Cost: $25,900.00
Bid Amount: $25,900.00

ELMER J. CHESBRO DAM (STATE DAM NO. 72-011)

I. REPAIR OF EARTHQUAKE-INDUCED CRACKS CAUSED BY THE LOMA PRIETA EARTHQUAKE (COMPLETED IN 1990)

A. Purpose

To repair cracks in the dam caused by the Loma Prieta Earthquake.

B. Background

The Loma Prieta Earthquake caused minor damage to the dam. Field investigations were conducted from October 22 through October 27, 1989 and included excavating backhoe trenches across selected cracked areas, completing ground surveys of existing surface survey monuments, and completing detailed ground surveys of the damaged areas. Two crack systems existed at Chesbro dam, one located in the upstream shoulder of the crest and the other located in the spillway entrance area.

C. Scope of Work

To repair the two crack systems by removing the valve house and hydraulic control lines and by moving riprap on the upstream face to just below the high water line, then excavating and recompacting damaged areas.

D. Planning Study and Engineers Report (None)

Title:
Date:
Author:
Library Call Number:

E. Geotechnical Report(s)

Title: Investigation of SCVWD Dams Affected by the Loma Prieta Earthquake of October 17, 1989
Date: March 1990
Author: R.L. Volpe & Associates
Library Call Number: TC 542.5 .I58 1990/Report also in RET's office.

Title: Repairs of SCVWD Dams Affected by the Loma Prieta Earthquake of October 17, 1989
Date: June 1990
Author: R.L. Volpe & Associates
Library Call Number: TC 542.5 .R4 1990/Report also in RET's office.

F. **Plans and Specifications (None)**

Title:
Date:
Library Call Number:
Engineering Drawing Numbers: None

G. **Construction Contract (Not Available)**

Awarded to: Equipment rental contractor and Santa Clara Valley Water District Maintenance
Construction Period: 1989-1990
Final Cost:
Bid Amount:

GUADALUPE DAM (STATE DAM NO. 72-005)

I. INLET TOWER EXTENSION (COMPLETED IN 1948)

A. Purpose

Extend inlet tower above silt level.

B. Background

Presume reservoir siltation was interfering with operation of existing inlet tower structure.

C. Scope of Work

Construct a 20-foot high inlet tower extension.

D. Planning Study and Engineers Report (None)

Title:
Date:
Author:
Library Call Number:

E. Geotechnical Report(s) (None)

Title:
Date:
Author:
Library Call Number:

F. Plans and Specifications (None)

Title:
Date:
Library Call Number:
Engineering Drawing Numbers: 2857

G. Construction Contract (None)

Awarded to:
Construction Period:
Final Cost:
Bid Amount:

II. DAM RESTORATION (COMPLETED IN 1971)

A. Purpose

Undocumented

B. Background

Undocumented

C. Scope of Work

Construction of about 64,000 square feet of concrete dam facing, 5,700 tons of filter material, and 39 cubic yards of reinforced concrete wall to satisfactorily complete the restoration of Guadalupe Dam.

D. Planning Study and Engineers Report (None)

Title:
Date:
Author:
Library Call Number:

E. Geotechnical Report(s) (None)

Title:
Date:
Author:
Library Call Number:

F. Plans and Specifications

Title: Specifications and Contract Documents for the Restoration of Guadalupe Dam, Project No. 90089
Date: 1970
Library Call Number: 1.5.0061
Engineering Drawing Numbers: None

G. Construction Contract

Awarded to: McCarthy-Spiesman
Construction Period: N/A to 10/15/71
Final Cost: $63,364.89
Bid Amount: $193,540.00

Note: Only incompelte information is available.

III. OUTLET CONTROL HOUSE (COMPLETED IN 1972)

A. Purpose

To construct a control house for the outlet works valves.

B. Background

Undocumented

C. Scope of Work

To construct a 12-foot by 10-foot by 10-foot, 2-inch concrete structure to house the outlet works valves. To move and elevate existing manual valve operator to new control house.

D. Planning Study and Engineers Report (None)

Title:
Date:
Author:
Library Call Number:

E. Geotechnical Report(s) (None)

Title:
Date:
Author:
Library Call Number:

F. Plans and Specifications (None)

Title:
Date:
Library Call Number:
Engineering Drawing Numbers: 04796-04799

G. Construction Contract (None)

Awarded to:
Construction Period:
Final Cost:
Bid Amount:

IV. DAM RESTORATION (COMPLETED IN 1972)

A. Purpose

To place embankment fill on the lower portion of the existing embankment to prevent further failure of upstream slope.

B. Background

A slide occurred slightly below El. 560 and the upstream toe in the center of the embankment. This was discovered upon removal of a portion of the concrete face. Tests indicated further failure could occur if slide was not mitigated.

C. Scope of Work

Removal of about 20,000 cubic yards of unsuitable material and the construction of about 82,200 cubic yards of embankment, including about 2,200 cubic yards of filter material, about 84 cubic yards of concrete structures, and 36 lineal feet of reinforced concrete pipe to construct a new inlet tower and valve box after demolition of the original inlet structure.

D. Planning Study and Engineers Report (None)

Title:
Date:
Author:
Library Call Number:

E. Geotechnical Reports

Title: Exploration for Borrow Material for the Repair of Guadalupe Dam, Office Report
Date: February 1972
Author: Vantine, James V.
Library Call Number: 1.5.0086

Title: Studies of Strengthening the Dam with an Upstream Berm
Date: February 1972
Author: Sherard, James L.
Library Call Number: None (Located in RET's office in binder titled "Guadalupe Dam, Sherard and Related Reports")

Title: Memorandum to Ed Ferguson, Earthflow on Upstream Face of Guadalupe Dam, December 23 to December 27, 1971
Date: January 11, 1972
Author: Iwamura, Tom I.
Library Call Number: None (Located in RET's office in binder titled "Guadalupe Dam, Sherard and Related Reports")

F. Plans and Specifications

Title: Specifications and Contract Documents for the Guadalupe Dam Restoration
Date: 1971
Library Call Number: N/A
Engineering Drawing Numbers: 03721-03726

G. Construction Contract

Awarded to: Bragato
Construction Period: 6/20/72 to 10/15/72
Final Cost: $132,563.00
Bid Amount: $140,070.00

V. OUTLET PIPE REPAIR (COMPLETED IN 1977)

A. Purpose

To repair the outlet pipe including all appurtenances, auxiliary facilities and auxiliary work.

B. Background

Undocumented

C. Scope of Work

Remove 36-inch by 30-inch reducer flange portion of 36-inch pipe. Install new 36-inch by 30-inch reducer and 36-inch by 30-inch pipe and flange. Work location: Downstream control house.

D. Planning Study and Engineers Report (None. Maintenance project.)

Title:
Date:
Author:
Library Call Number:

E. Geotechnical Report(s) (None)

Title:
Date:
Author:
Library Call Number:

F. Plans and Specifications

Title: Specifications and Contract Documents for the Repair of the Outlet Pipe at Guadalupe Reservoir
Date: 1976
Library Call Number: None. Specifications are in Construction Division.
Engineering Drawing Numbers: 06202-06203

G. Construction Contract

Awarded to: Power-Anderson
Construction Period: 1/17/77 to 3/2/77
Final Cost: $9,500.00
Bid Amount: $9,500.00

VI. REPLACEMENT OF HYDRAULIC PIPING AND FLEX HOSES (COMPLETED IN 1984)

A. Purpose

Undocumented

B. Background

Undocumented

C. Scope of Work

To replace hydraulic piping and flex hoses.

D. Planning Study and Engineers Report (None. Maintenance project.)

Title:
Date:
Author:
Library Call Number:

E. Geotechnical Report(s) (None)

Title:
Date:
Author:
Library Call Number:

F. Plans and Specifications (None)

Title:
Date:
Library Call Number:
Engineering Drawing Numbers: None

G. Construction Contract (None)

Awarded to: District
Construction Period:
Final Cost:
Bid Amount:

Note: Only incomplete information is available.

VII. OUTLET MODIFICATIONS AND REPAIRS (COMPLETED IN 1987)

A. Purpose

To repair the energy dissipator.

B. Background

The energy dissipation structure degraded over time and needed replacement.

C. Scope of Work

To make modifications and repairs to Almaden Dam and Guadalupe Dam outlet facilities. Work consists of raising the existing valve operator, constructing an outlet control house on the existing outlet control structure at Almaden Reservoir, and repairing of the energy dissipator at Guadalupe Reservoir.

D. Planning Study and Engineers Report (None. Maintenance project.)

Title:
Date:
Author:
Library Call Number:

E. Geotechnical Report(s) (None)

Title:
Date:
Author:
Library Call Number:

F. Plans and Specifications

Title: Specifications and Contract Documents for the Modifications and Repairs to Almaden Dam and Guadalupe Dam Outlet Facilities
Date: February 1987
Library Call Number: None. Specifications are in Construction Division.
Engineering Drawing Numbers: 14233-14234, 14239-14243, 14249-14250

G. Construction Contract

Awarded to: Anderson-Pacific
Construction Period: 5/11/87 to 8/28/87
Final Cost: $123,043.31
Bid Amount: $104,000.00

VIII. REPAIR OF EARTHQUAKE-INDUCED CRACKS CAUSED BY THE LOMA PRIETA EARTHQUAKE (COMPLETED IN 1990)

A. Purpose

To repair cracks in the dam caused by the Loma Prieta earthquake.

B. Background

The Loma Prieta Earthquake caused minor damage to the dam. Field investigations were conducted from October 22 through October 27, 1989 and included excavating backhoe trenches across selected cracked areas, completing ground surveys of existing surface survey monuments, and completing detailed ground surveys of the damaged areas. Cracking was present on the upstream buttress below the Elevation 570 berm and at crest level in both the right and left abutment areas.

C. Scope of Work

To conduct density tests and to excavate and recompact fill material.

D. Planning Study and Engineers Report (None)

Title:
Date:
Author:
Library Call Number:

E. Geotechnical Report(s) (None)

Title: Investigation of SCVWD Dams Affected by the Loma Prieta Earthquake of October 17, 1989
Date: March 1990
Author: R.L. Volpe & Associates
Library Call Number: TC 542.5 .I58 1990/Report also in RET's office.

Title: Repairs of SCVWD Dams Affected by the Loma Prieta Earthquake of October 17, 1989
Date: June 1990
Author: R.L. Volpe & Associates
Library Call Number: TC 542.5 .R4 1990/Report also in RET's office.

F. Plans and Specifications (None)

Title:
Date:
Library Call Number:
Engineering Drawing Numbers: None

G. Construction Contract (None)

Awarded to: Stevens Creek Quarry
Construction Period: 1989
Final Cost:
Bid Amount:

LEROY ANDERSON DAM (STATE DAM NO. 72-009)

I. INLET TOWER EXTENSION (COMPLETED IN 1960)

A. Purpose

Raise tower or original inlet structure to place intake openings above siltation level.

B. Background

Presume reservoir siltation was interfering with operation of existing inlet tower structure.

C. Scope of Work

Construct an 8-foot, 8-inch high inlet tower extension.

D. Planning Study and Engineers Report (None. Maintenance project.)

Title:
Date:
Author:
Library Call Number:

E. Geotechnical Report(s) (None)

Title:
Date:
Author:
Library Call Number:

F. Plans and Specifications (None)

Title:
Date:
Library Call Number:
Engineering Drawing Numbers: 02872

G. Construction Contract (None)

Awarded to: District
Construction Period:
Final Cost:
Bid Amount:

II. SPILLWAY ENLARGEMENT AND CREST MODIFICATION (COMPLETED IN 1988)

A. Purpose

To increase spillway capacity to meet current criteria.

B. Background

In the process of reviewing the alternatives for replacing Cochrane Bridge, the Division of Safety of Dams (DSOD) reviewed the design criteria for the spillway at Anderson Dam and concluded that the spillway did not meet current capacity criteria. DSOD directed the District to modify the spillway to meet their current capacity criteria.

C. Scope of Work

Widen existing spillway, construct new spillway weir and approach channel flow control structures, widen unlined discharge channel below spillway; raise crest of dam to restore original freeboard and to provide additional freeboard.

D. Planning Study and Engineers Report

Title: Leroy Anderson Dam and Spillway Planning Study Consisting of the Engineer's Report and Final Negative Declaration for Modification
Date: October 1985
Author: Santa Clara Valley Water District
Library Call Number: 1.5.0611

E. Geotechnical Report(s)

Title: Geotechnical Investigation, Leroy Anderson Dam Spillway Enlargement
Date: February 1984
Author: Wahler Associates
Library Call Number: TA 705.3 .A56 L4 1984

Title: Geotechnical Evaluations, Anderson Dam Spillway, Santa Clara County, California
Date: February 1987
Author: Wahler Associates
Library Call Number: TA 705.3 A56 G4 1987

Title: Hydraulic Model Study of Anderson Dam Spillway Modifications
Date: 1986
Author: Alexander Rudavsky, Gustavo Arboleda, Mutasem Fadel
Library Call Number: TC 555 R8 1986

F. Plans and Specifications

Title: Specifications and Contract Documents for Modifications to Leroy Anderson Dam and Spillway
Date: February 19, 1987
Library Call Number: None. Specifications are in Construction Division.
Engineering Drawing Numbers: 13925-13957

G. Construction Contract

Awarded to: Raisch Structures
Construction Period: 5/11/87 to 2/5/88
Final Cost: $5,138,976.79
Bid Amount: $4,368,700.00

III. NEW INLET STRUCTURE FOR OUTLET WORKS (COMPLETED IN 1989)

A. Purpose

To replace existing inlet structure, which was subject to accumulation of reservoir sediment, and to provide operational flexibility with multiple ports at different elevations, allowing control of quality of water released from the reservoir.

B. Background

The existing inlet structure had been raised at least twice. An additional raise would not meet seismic stability criteria. In addition, it was desirable to have multiple inlet ports so that the quality of water withdrawn from the reservoir could be selected.

C. Scope of Work

New sloping multiport inlet structure on the left reservoir slope; new hydraulic valve operating lines; new valve operating vault.

D. Planning Study and Engineers Report (None)

Title:
Date:
Author:
Library Call Number:

D. Geotechnical Report(s)

Title: Addendum Letter Report, Geotechnical Investigation for Proposed Control Building Modifications to the Inlet Structure at Anderson Dam
Date: 1988
Author: Wahler Associates
Library Call Number: TA 705.3 S383 A4 1988

Title: Geotechnical Investigation Leroy Anderson Dam Inlet Structure Modification
Date: January 1988
Author: Wahler Associates
Library Call Number: TA 705.3 S383 G4 1988

E. Plans and Specifications

Title: Specifications and Contract Documents for Leroy Anderson Dam Intake Structure Modification
Date: 1988
Library Call Number: None. Specifications are in Construction Division.
Engineering Drawing Numbers: 15355-15382

F. Construction Contract

Awarded to: Anderson-Pacific
Construction Period: 6/6/88 to 1/31/89
Final Cost: $1,554,007
Bid Amount: $1,262,450

LEXINGTON DAM (STATE DAM NO. 72-008)

I. OUTLET PIPE MODIFICATIONS (COMPLETED IN 1956)

A. Purpose

Undocumented

B. Background

Undocumented

C. Scope of Work

Undocumented

D. Planning Study and Engineers Report (None)

Title:
Date:
Author:
Library Call Number:

E. Geotechnical Report(s) (None)

Title:
Date:
Author:
Library Call Number:

F. Plans and Specifications (None)

Title:
Date:
Library Call Number:
Engineering Drawing Numbers: 02906-02909

G. Construction Contract (None)

Awarded to:
Construction Period:
Final Cost:
Bid Amount:

Note: Only incomplete information is available.

II. EXTENSION OF SPILLWAY CHUTE AND CONSTRUCTION OF MAINTENANCE ACCESS BRIDGE (COMPLETED IN 1956)

A. Purpose

Necessary for Highway 17 construction.

B. Background

Chute extension required by Highway 17 construction. Maintenance access bridge needed to maintain access to downstream toe of dam.

C. Scope of Work

Construct maintenance access bridge and extension of spillway chute.

D. Planning Study and Engineers Report (None. CalTrans project.)

Title:
Date:
Author:
Library Call Number:

E. Geotechnical Report(s) (None Found)

Title:
Date:
Author:
Library Call Number:

F. Plans and Specifications (Not available. CalTrans project.)

Title:
Date:
Library Call Number:
Engineering Drawing Numbers: 05315-05321; 2851

G. Construction Contract

Awarded by: California Department of Transportation
Construction Period:
Final Cost:
Bid Amount:

Notes: [1] Designed by California Department of Transportation.
[2] Construction administered and funded by CalTrans.
[3] The bridge referred to is the lower maintenance access bridge that spans the spillway chute extension.

III. INLET STRUCTURE EXTENSION (COMPLETED IN 1960)

A. Purpose

Install 10¾-foot high addition to original inlet structure.

B. Background

Silt was building up around original inlet structure.

C. Scope of Work

Install inlet structure extension. Remove, clean, paint, and reinstall existing trashracks and steel doors on new inlet structure extension. Install new hinges for existing steel doors.

D. Planning Study and Engineers Report (None. Maintenance project.)

Title:
Date:
Author:
Library Call Number:

E. Geotechnical Report(s)

Title:
Date:
Author:
Library Call Number:

F. Plans and Specifications

Title: Specifications for Lexington Dam Addition to Inlet Structure
Date: 1960
Library Call Number: 1.3.0132 (In Archives Box 1670)
Engineering Drawing Numbers: 02849-02850

G. Construction Contract

Awarded to:
Construction Period:
Final Cost:
Bid Amount:

IV. REPLACEMENT OF LINES AND VALVES (COMPLETED IN 1985)

A. Purpose

Replace upstream valves and hydraulic lines to inlet structure.

B. Background

Upstream valves had deteriorated and needed replacement. Hydraulic lines replaced as a maintenance measure.

C. Scope of Work

To replace both upstream 36-inch butterfly valves and all hydraulic lines and flex hoses, and to recondition hydraulic cylinders

D. Planning Study and Engineers Report (None)

Title:
Date:
Author:
Library Call Number:

E. Geotechnical Report(s) (None)

Title:
Date:
Author:
Library Call Number:

F. Plans and Specifications (None)(1)

Title:
Date:
Library Call Number:
Engineering Drawing Numbers: None

G. Construction Contract (None)

Awarded to: District
Construction Period:
Final Cost:
Bid Amount: N/A

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(1)A Specifications most likely was written to purchase valves from EMPRO Systems (Source—Gary Kawaoka).

V. INLET STRUCTURE MODIFICATIONS (COMPLETED IN 1988)

A. Purpose

Provide higher level inlet structure.

B. Background

Original inlet structure was being buried by reservoir siltation.

C. Scope of Work

Constructing a reinforced concrete intake structure complete with trashracks; a reinforced concrete enclosed steel manifold and outlet conduit; removal of a portion of the existing outlet conduit and manifold; relocation of two existing 36-inch butterfly valves complete with actuators, hydraulic controls and accessories.

D. Planning Study and Engineers Report (None. Maintenance project.)

Title:
Date:
Author:
Library Call Number:

E. Geotechnical Report(s)

Title: Lexington Reservoir Outlet Modification Final Design, Geotechnical Investigation
Date: December 1987
Author: Earth Sciences Associates
Library Call Number: TA 705.3 L675 L49 1987

F. Plans and Specifications

Title: Specifications and Contract Documents for Lexington Dam Intake Structure Modification
Date: March 1988
Library Call Number: 1.5.703
Engineering Drawing Numbers: 14347-14367

G. Construction Contract

Awarded to: Soil Engineering Construction
Construction Period: 5/27/88 to 11/22/88
Final Cost: $865,676.38
Bid Amount: $659,100.00

VI. REPAIR OF COLLAPSED SECTION OF OUTLET PIPE (COMPLETED IN 1989)

A. Purpose

Restore full capacity and check for possible damage to outlet pipe and its concrete jacket.

B. Background

Steel liner of outlet pipe was buckled by vacuum, possibly shortly after Loma Prieta Earthquake.

C. Scope of Work

Repair collapsed section of outlet pipe and earthwork to daylight outlet pipe exit.

D. Planning Study and Engineers Report (None. Maintenance project.)

Title:
Date:
Author:
Library Call Number:

E. Geotechnical Report(s) (None)

Title:
Date:
Author:
Library Call Number:

F. Plans and Specifications (None)

Title:
Date:
Library Call Number:
Engineering Drawing Numbers: Possibly No. 14360-14364

G. Construction Contract (None)

Awarded to: District and Equipment rental contractor
Construction Period:
Final Cost:
Bid Amount:

VII. REPAIR OF EARTHQUAKE-INDUCED CRACKS CAUSED BY THE LOMA PRIETA EARTHQUAKE (COMPLETED IN 1990)

A. Purpose

To repair cracks in the dam caused by the Loma Prieta earthquake.

B. Background

The Loma Prieta Earthquake caused minor damage to the dam. Field investigations were conducted from October 22 through October 27, 1989 and included excavating backhoe trenches across selected cracked areas, completing ground surveys of existing surface survey monuments, and completing detailed ground surveys of the damaged areas. Cracking was present on the upstream right side of the reservoir and dam, the upstream face, the right and left side of the crest, and in the downstream right and left abutment areas.

C. Scope of Work

To conduct density tests and to excavate and recompact fill material.

D. Planning Study and Engineers Report (None)

Title:
Date:
Author:
Library Call Number:

E. Geotechnical Report(s)

Title: Investigation of SCVWD Dams Affected by the Loma Prieta Earthquake of October 17, 1989
Date: March 1990
Author: R.L. Volpe & Associates
Library Call Number: TC 542.5 .I58 1990/Report also in RET's office.

Title: Repairs of SCVWD Dams Affected by the Loma Prieta Earthquake of October 17, 1989
Date: June 1990
Author: R.L. Volpe & Associates
Library Call Number: TC 542.5 .R4 1990/Report also in RET's office.

F. Plans and Specifications (None)

Title:
Date:
Library Call Number:
Engineering Drawing Numbers: None

G. Construction Contract (None)

Awarded to: Equipment Rental Contractor and Santa Clara Valley Water District Maintenance
Construction Period: 1989-1990
Final Cost:
Bid Amount:

VIII. AIR VENT (COMPLETED IN 1992)

A. Purpose

To allow adequate ventilation in the outlet pipe such that a vacuum is not created in the pipe.

B. Background

An inspection of the outlet pipe after the Loma Prieta earthquake revealed that a 30-foot section of the pipe had partially collapsed creating a significant restriction to the discharge capacity. This failure was caused by the formation of a vacuum. DSOD was informed of the failure, and immediate steps were taken to repair the damaged pipe. The original 4-inch air vent was not designed for vacuum relief. The new 14-inch air vent pipe, replacing the 4-inch air vent, was connected to the existing outlet pipe.

C. Scope of Work

Install a 14-inch air vent pipe which required removal and restoration of a portion of the existing concrete encasement surrounding the outlet pipe and the installation of concrete trench cutoff walls and anchor block.

D. Planning Study and Engineers Report (None. Maintenance project.)

Title:
Date:
Author:
Library Call Number:

E. Geotechnical Report(s) (None)

Title:
Date:
Author: None
Library Call Number:

F. Plans and Specifications(1)

Title: Specifications and Contract Documents for the Construction of the Lexington Air Vent at Lexington Dam
Date: June 1992
Library Call Number: 1.5.814
Engineering Drawing Numbers: 16269-16274

G. Construction Contract

Awarded to: Pacific Underground
Construction Period: 9/1/92 to 10/12/92
Final Cost: $52,412.00
Bid Amount: $49,600.00

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(1)Information from Central Files, in file titled "Installation of Air Vent, A/C: Bids and Specs, 9190."

IX. FREEBOARD RESTORATION (DESIGN IN PROGRESS, 1994-7)

A. Purpose

To restore the crest of the dam to its original design elevation and to improve the existing dam and spillway to safely contain and pass the PMF.

B. Background

DSOD is requiring the District to bring Lexington Dam into compliance with the items listed under purpose.

C. Scope of Work

The crest of Lexington Dam will be raised 1 to 4 feet by adding select fill as needed. Alma Bridge Road will be reconstructed on the new fill. The sides of the spillway will be raised as needed to pass the PMF.

D. Planning Study and Engineers Report—None to Date (9/95)

Title: Lexington Dam Modifications Planning Study, Consisting of the Engineer's Report and Final Initial Study/Negative Declaration
Date: July 1995
Author: Santa Clara Valley Water District
Library Call Number: TC 557.C2 L49 1995

E. Geotechnical Report(s)

Title: Predesign Investigation, Lexington Dam Freeboard Restoration Project
Date: 1993
Author: William Cotton & Associates, Inc.
Library Call Number: TC 557 C2 L4 1993

F. Plans and Specifications—None to Date (9/95)

Title:
Date:
Library Call Number:
Engineering Drawing Numbers:

G. Construction Contract—None to Date (9/95)

Awarded to:
Construction Period:
Final Cost:
Bid Amount:

PAGE DAM (NONJURISDICTIONAL)

I. REPAIR (COMPLETED IN 1935)

A. Purpose

To augment well replenishment in the Santa Clara Valley.

B. Background

Undocumented

C. Scope of Work

To construct "sausage dams" and to repair the old "Page" Diversion and percolation dam in order to further stimulate streambed percolation.

D. Planning Study and Engineers Report (None)

Title:
Date:
Author:
Library Call Number:

E. Geotechnical Report(s) (None)

Title:
Date:
Author:
Library Call Number:

F. Plans and Specifications (None)

Title: Application to Civil Works Administration and Report on Los Gatos Creek Project of Santa Clara Valley Water Conservation District, Santa Clara County, California
Date: 1933
Library Call Number: Archives Box 2070
Engineering Drawing Numbers: None
Construction Contract (1)
  Awarded to: Consolidated Western Steel Division
  Construction Period: After 6/23/54
  Final Cost:
  Bid Amount: $20,878.07

G. Construction Contract

Awarded to: Engineered Concrete Waterproofing
Construction Period: Approx. 3/31/77 to 4/30/77
Final Cost:
Bid Amount: $56,040.00

RINCONADA RESERVOIR (STATE DAM NO. 72-010)

I. LINER REPLACEMENT (COMPLETED IN 1993)

A. Purpose

Replace old liner that developed leaks and was locally penetrated by roots.

B. Background

Leakage and root penetration became evident on inspection after Loma Prieta Earthquake.

C. Scope of Work

Removal and disposal of the existing butyl rubber liner; installation of geotextile fabric; installation of rubber sheeting strips, adhesives, epoxy, and stainless steel anchor bolts and bars; the preparation of the surfaces by removal of excessive existing asphalt joint filler, replacement of joint filler, grinding of rough concrete, epoxy mortaring of voids, and other work necessary to produce a smooth uniform supporting surface; and the furnishing and installing geotextile fabric and a new hypalon lining.

D. Planning Study and Engineers Report (None. Maintenance project.)

Title:
Date:
Author:
Library Call Number:

E. Geotechnical Report(s) (None)

Title:
Date:
Author:
Library Call Number:

F. Plans and Specifications

Title: Specifications and Contract Documents for the Replacement of the Rinconada Reservoir Liner
Date: June 1992
Library Call Number: 1.5.813
Engineering Drawing Numbers: 17498-17512

G. Construction Contract

Awarded to: C.W. Neal Corporation
Construction Period: 9/8/92 to 3/6/93
Final Cost: $349,199.00
Bid Amount: $348,597.00

STEVENS CREEK DAM (STATE DAM NO. 72-007)

I. RELOCATION OF STEVENS CREEK ROAD (COMPLETED IN 1935 or 1936)

A. Purpose

To relocate Stevens Creek Road around the reservoir.

B. Background

Necessary to relocated road above reservoir.

C. Scope of Work

Relocate Stevens Creek Road around reservoir including adding 5746 cubic yards of fill.

D. Planning Study and Engineers Report

Title:
Date:
Author:
Library Call Number:

E. Geotechnical Report(s) (None)

Title:
Date:
Author:
Library Call Number:

F. Plans and Specifications (None)

Title:
Date:
Library Call Number:
Engineering Drawing Numbers: 3290

G. Construction Contract (None)

Awarded to:
Construction Period:
Final Cost:
Bid Amount:

Note: Only incomplete information is available.

II. INLET TOWER EXTENSION (COMPLETED IN 1945)

A. Purpose

Extend inlet tower above silt level.

B. Background

Presume reservoir siltation was interfering with operation of existing inlet tower structure.

C. Scope of Work

Construct an inlet tower extension.

D. Planning Study and Engineers Report (None. Maintenance project.)

Title:
Date:
Author:
Library Call Number:

E. Geotechnical Report(s) (None)

Title:
Date:
Author:
Library Call Number:

F. Plans and Specifications (None)

Title:
Date:
Library Call Number:
Engineering Drawing Numbers: None

G. Construction Contract (None)

Awarded to:
Construction Period:
Final Cost:
Bid Amount:

Note: Only incomplete information is available.

III. REPLACE VALVE WITH BLIND FLANGE (COMPLETED IN 1946)

A. Purpose

Undocumented

B. Background

Undocumented

C. Scope of Work

To remove one 30-inch downstream valve and replace with a blind flange

D. Planning Study and Engineers Report (None. Maintenance project.)

Title:
Date:
Author:
Library Call Number:

E. Geotechnical Report(s) (None)

Title:
Date:
Author:
Library Call Number:

F. Plans and Specifications (None)

Title:
Date:
Library Call Number:
Engineering Drawing Numbers: None

G. Construction Contract (None)

Awarded to:
Construction Period:
Final Cost:
Bid Amount:

Note: Only incomplete information is available.

IV. INLET TOWER EXTENSION (COMPLETED IN 1961)

A. Purpose

Extend inlet tower above silt level.

B. Background

Presume reservoir siltation was interfering with operation of existing inlet tower structure.

C. Scope of Work

Construct a 15-foot high inlet tower extension.

D. Planning Study and Engineers Report (None)

Title:
Date:
Author:
Library Call Number:

E. Geotechnical Report(s) (None)

Title:
Date:
Author:
Library Call Number:

F. Plans and Specifications (None)

Title:
Date:
Library Call Number:
Engineering Drawing Numbers: 3031

G. Construction Contract (None)

Awarded to:
Construction Period:
Final Cost:
Bid Amount:

Note: Only incomplete information is available.

V. MODIFICATION OF VALVE OPERATOR AND CONSTRUCTION OF OUTLET CONTROL HOUSE (COMPLETED IN 1971)

A. Purpose

To provide a local means of control of the outlet valves.

B. Background

The outlet valve control that discharged to the creek was in a pit and operated by hand to this point. The structure was raised to make operating the valve controls more convenient.

C. Scope of Work

To raise the existing valve operator and build an outlet control structure at Stevens Creek Reservoir.

D. Planning Study and Engineers Report (None. Maintenance project.)

Title:
Date:
Author:
Library Call Number:

E. Geotechnical Report(s) (None)

Title:
Date:
Author:
Library Call Number:

F. Plans and Specifications

Title: Specifications and Contract Document for the Modification of the Valve Operator and for the Construction of an Outlet Control House at Almaden Reservoir and Stevens Creek Reservoir
Date: 6/22/71
Library Call Number: 1.5.0327
Engineering Drawing Numbers: 03709-03712

G. Construction Contract

Awarded to: Terra and Weaver, Inc.
Construction Period: 9/6/71 to 10/26/71
Final Cost: $13,115.75
Bid Amount: $12,300.00

VI. REINSTALL 30-INCH VALVE (COMPLETED IN 1979)

A. Purpose[1]

To repair hydraulic lines.

B. Background[1]

Hydraulic lines broke in 1976 and were replaced at that time. They failed in 1979 (leaking oil) and were repaired.

C. Scope of Work[1]

Includes placement of several pipe supports, and testing and cycling of both valves.

D. Planning Study and Engineers Report (None. Maintenance project.)

Title:
Date:
Author:
Library Call Number:

E. Geotechnical Report(s) (None)

Title:
Date:
Author:
Library Call Number:

F. Plans and Specifications (None)

Title:
Date:
Library Call Number:
Engineering Drawing Numbers: None

G. Construction Contract (None)

Awarded to: District
Construction Period:
Final Cost:
Bid Amount:

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[1] Information from memo to Don Erling from Don Erba dated 1/10/80, located in Central files in file titled "General 80-9191."

VII. DAM MODIFICATIONS (COMPLETED IN 1985)

A. Purpose

Modify dam to withstand design earthquake.

B. Background

Seismic performance analysis of the dam indicated the need for modifications.

C. Scope of Work

Constructing upstream and downstream dam buttresses, access road, concrete maintenance road, drainage ditches, culverts, inlet and outlet works upstream and downstream of existing dam; the installation of pneumatic piezometers, settlement monuments, two 42-inch District furnished sluice gate assemblies consisting of sluice gates, reducer spool pieces, hydraulic cylinders, and hand pumps; magnetic flowmeter and flowmeter vault; the removal and reinstallation of two District 30-inch butterfly valves with electric actuators and accessories; modifications to the existing concrete spillway and log boom; and providing other miscellaneous appurtenances.

D. Planning Study and Engineers Report

Title: Planning Study Consisting of the Engineer's Report and Negative Declaration for the Stevens Creek Dam Modifications
Date: April 1985
Author: Santa Clara Valley Water District
Library Call Number: 1.5.0597

E. Geotechnical Reports (Design)

Title: Remedial Design Report, Stevens Creek Dam
Date: October 1984
Author: Wahler Associates
Library Call Number: TC 557 .C2 S8 1984

Title: Report on Preliminary Remedial Design Investigation of Stevens Creek Dam
Date: August 1982
Author: Wahler Associates
Library Call Number: TC 557 .C2 S8 1982

F. Plans and Specifications

Title: Specifications and Contract Documents for the Stevens Creek Dam Modifications
Date: April 1985
Library Call Number: 1.5.0595
Engineering Drawing Numbers: 13093-13125

G. Construction Contract

Awarded to: Piombo Corporation
Construction Period: 6/24/85 to 10/21/85
Final Cost: $2,646,763.72
Bid Amount: $2,658,300.00

VASONA DAM (STATE DAM NO. 72-006)

I. REMOVAL OF RADIAL GATES (COMPLETED IN 1971)

A. Purpose

Undocumented

B. Background

Undocumented

C. Scope of Work

Undocumented

D. Planning Study and Engineers Report (None)

Title:
Date:
Author:
Library Call Number:

E. Geotechnical Report(s) (None)

Title:
Date:
Author:
Library Call Number:

F. Plans and Specifications (None)

Title:
Date:
Library Call Number:
Engineering Drawing Numbers: None

G. Construction Contract(1)

Awarded to:
Construction Period:
Final Cost:
Bid Amount:

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(1)Project put to bid.

Note: Only incomplete information is available.

II. CONSTRUCTION OF METERING FACILITY (COMPLETED IN 1975)

A. Purpose

To construct a metering facility on the discharge apron adjacent to the easterly concrete wall at Vasona Dam.

B. Background

Undocumented

C. Scope of Work

To install 16 feet of 42-inch diameter concrete pipe encased in concrete and to construct a concrete discharge structure designed to maintain a full pipe for metering purposes.

D. Planning Study and Engineers Report (None)

Title:
Date:
Author:
Library Call Number:

E. Geotechnical Report(s)

Title:
Date:
Author:
Library Call Number:

F. Plans and Specifications(1)

Title: Plans and Specifications for Construction of a Metering Facility at Vasona Dam
Date: August 26, 1975
Library Call Number: None—specifications are in Construction Division Engineering
Drawing Numbers: None

G. Construction Contract(1)

Awarded to: Power-Anderson, Inc.
Construction Period: Proposed construction period 10/6/75 to 10/25/75
Final Cost: N/A
Bid Amount: $4,850.00

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(1) Information in Central Files, in file titled "IMPS: Meter Facility, A/C: Power-Anderson, 9192."

III. INSTALL REMOTE CONTROL SYSTEM (COMPLETED IN 1985)

A. Purpose

Remote control of outlet valve.

B. Background

Undocumented

C. Scope of Work

To remove an existing 42-inch concrete outlet, install a 42-inch steel outlet extension with concrete encasement, construct a concrete blockhouse, install a flowmeter, and perform all required electrical work.

D. Planning Study and Engineers Report (None. Maintenance project.)

Title:
Date:
Author:
Library Call Number:

E. Geotechnical Report(s) (None)

Title:
Date:
Author:
Library Call Number:

F. Plans and Specifications

Title: Specifications and Contract Documents for the Installation of the Vasona Dam Remote Control System
Date: April 1985
Library Call Number: 1.5.0598
Engineering Drawing Numbers: 13251-13267

G. Construction Contract

Awarded to: Power-Anderson
Construction Period: 7/1/85 to 11/27/85
Final Cost: $72,900.00
Bid Amount: $72,900.00

IV. REPAIR OF EARTHQUAKE-INDUCED CRACKS CAUSED BY THE LOMA PRIETA EARTHQUAKE (COMPLETED IN 1990)

A. Purpose

To repair cracks in the dam caused by the Loma Prieta earthquake.

B. Background

The Loma Prieta Earthquake caused minor damage to the dam. Field investigations were conducted from October 22 through October 27, 1989 and included excavating backhoe trenches across selected cracked areas, completing ground surveys of existing surface survey monuments, and completing detailed ground surveys of the damaged areas. Longitudinal cracking was present in the right embankment section of the dam crest.

C. Scope of Work

To conduct geotechnical tests and to excavate and recompact fill material.

D. Planning Study and Engineers Report (None)

Title:
Date:
Author:
Library Call Number:

E. Geotechnical Report(s) (None)

Title: Investigation of SCVWD Dams Affected by the Loma Prieta Earthquake of October 17, 1989
Date: March 1990
Author: R.L. Volpe & Associates
Library Call Number: TC 542.5 .I58 1990/Report also in RET's office.

Title: Repairs of SCVWD Dams Affected by the Loma Prieta Earthquake of October 17, 1989
Date: June 1990
Author: R.L. Volpe & Associates
Library Call Number: TC 542.5 .R4 1990/Report also in RET's office.

F. Plans and Specifications (None)

Title:
Date:
Library Call Number:
Engineering Drawing Numbers: None

G. Construction Contract (None)

Awarded to: District/Stevens Creek Quarry Construction Co.
Construction Period: 1989
Final Cost:
Bid Amount: